

Name: \_\_\_\_\_

## Forest Management

### Directions:

Evaluate the student by checking the appropriate number or letter to indicate the degree of competency. The rating for each task should reflect **employability readiness** rather than the grades given in class.

### Rating Scale:

- 3 Mastered** – can work independently with no supervision
- 2 Requires Supervision** – can perform job completely with limited supervision
- 1 Not Mastered** – requires instruction and close supervision
- N No Exposure** – no experience or knowledge in this area

NOTE: The code in parentheses is the competency identification number used in computerized management systems.

| 3 | 2 | 1 | N | A. Careers   | Notes: |
|---|---|---|---|--|--------|
|   |   |   |   | 1. Explain professional conservation career opportunities and their requirements with an emphasis on forestry careers (A001) |        |
|   |   |   |   | 2. Explain technical forestry career opportunities and their requirements (A002)   |        |
|   |   |   |   | Other:   |        |

| 3 | 2 | 1 | N | B. Forest Plant Identification                                    | Notes: |
|---|---|---|---|---|--------|
|   |   |   |   | 1. Identify common Missouri trees without the use of a key (B001) |        |
|   |   |   |   | 2. Describe and use a plant identification key (B002)             |        |
|   |   |   |   | 3. Describe the silvics of common Missouri trees (B003)           |        |
|   |   |   |   | 4. Describe different tree uses (B004)                            |        |
|   |   |   |   | 5. Describe Missouri forest types (B006)                          |        |
|   |   |   |   | Other:  |        |

| 3 | 2 | 1 | N | C. Forest Measurement  | Notes: |
|---|---|---|---|--|--------|
|   |   |   |   | 1. Interpret surface features using aerial photographs and topographic maps (C001) |        |
|   |   |   |   | 2. Locate a tract of land by using a map and the legal description (C002)          |        |
|   |   |   |   | 3. Make measurements by chaining, pacing, and using a hand compass (C003)          |        |
|   |   |   |   | 4. Estimate diameter at breast height, tree height, and basal area per acre (C010) |        |
|   |   |   |   | 5. Describe and estimate site index (C011)   |        |
|   |   |   |   | 6. Describe stand density and determine stocking level (C012)                      |        |
|   |   |   |   | 7. Estimate the volume of standing timber (C008)                                   |        |
|   |   |   |   | 8. Identify criteria used in grading trees (C009)                                  |        |
|   |   |   |   | Other:   |        |

| 3 | 2 | 1 | N | D. Silvicultural Practices  | Notes: |
|---|---|---|---|---|--------|
|   |   |   |   | 1. List factors to consider when selecting a tree species for planting (D001)                   |        |
|   |   |   |   | 2. Describe the advantages and disadvantages of different site preparation methods (D002)       |        |
|   |   |   |   | 3. Identify and select proper methods for planting and seeding trees by hand and machine (D003) |        |
|   |   |   |   | 4. Design a windbreak (D004)  |        |
|   |   |   |   | 5. Describe principles of natural regeneration (D006)   |        |
|   |   |   |   | 6. Describe intermediate cuttings and apply tree deadening methods (D010)                       |        |
|   |   |   |   | 7. Describe and demonstrate pruning techniques (D008)   |        |
|   |   |   |   | 8. Demonstrate chain saw safety and maintenance procedures (D009)                               |        |
|   |   |   |   | Other:  |        |

| 3 | 2 | 1 | N | E. Forest Resource Protection  | Notes: |
|---|---|---|---|--|--------|
|   |   |   |   | 1. Describe watershed concepts and protection measures (E001)  |        |
|   |   |   |   | 2. Describe the causes, effects, behavior factors, and control methods associated with forest fires (E007) |        |
|   |   |   |   | 3. Describe common insect and disease problems in Missouri forests (E004)                                  |        |
|   |   |   |   | 4. Assess how forest management can be used to improve wildlife habitat (E005)                             |        |
|   |   |   |   | 5. List the effects recreation can have on the forest (E006)   |        |
|   |   |   |   | Other:   |        |

| 3 | 2 | 1 | N | F. Forest Management Plan   | Notes: |
|---|---|---|---|---|--------|
|   |   |   |   | 1. Identify sources of forestry assistance available to landowners (F001) |        |
|   |   |   |   | 2. Prepare a forest management plan (F002)                                |        |
|   |   |   |   | Other:  |        |

| 3 | 2 | 1 | N | Leadership & Personal Development for Advanced Students (Leadership Duty C)                   | Notes: |
|---|---|---|---|---|--------|
|   |   |   |   | 1. Develop a resume and complete a job application (C001)                                     |        |
|   |   |   |   | 2. Develop a plan for finding a job (C002)  |        |
|   |   |   |   | 3. Describe how to apply and interview for a job (C003)                                       |        |
|   |   |   |   | 4. Describe the characteristics needed to develop desirable personal and social skills (C004) |        |
|   |   |   |   | 5. Describe the importance and process of developing better human relationships (C005)        |        |
|   |   |   |   | Other:  |        |

|          |          |          |          |  |               |
|----------|----------|----------|----------|--|---------------|
| <b>3</b> | <b>2</b> | <b>1</b> | <b>N</b> | <b>Using the Missouri Farm Business Record Book (SAE Duty D)</b>                           | <b>Notes:</b> |
|          |          |          |          | 1. Describe the two types of accounting methods (D001)                                     |               |
|          |          |          |          | 2. Complete the forms needed to open the Missouri Farm Business Record Book (D002)         |               |
|          |          |          |          | 3. Develop a projected cash flow (D003)  |               |
|          |          |          |          | 4. Record receipts and expenditures in the Missouri Farm Business Record Book (D004)       |               |
|          |          |          |          | 5. Complete additional records in the Missouri Farm Business Record Book (D005)            |               |
|          |          |          |          | 6. Complete the forms necessary to summarize the Missouri Farm Business Record Book (D006) |               |
|          |          |          |          | 7. Analyze the farm business using the Missouri Farm Business Record Book (D007)           |               |
|          |          |          |          | Other:   |               |